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10/666,495	09/22/2003	Kia Silverbrook	BAL26US	8019

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393 DARLING STREET
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EXAMINER
CUTLER, ALBERT H

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2622	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 September 2003</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-11</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-11</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>22 September 2003</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some *   c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This office action is responsive to application 10/666,495 filed on September 22,

2003. Claims 1-11 are pending in the application and have been examined by the

examiner.

Information Disclosure Statement

2.   The Information Disclosure Statement (IDS) mailed on September 22, 2003 was

received and has been considered by the examiner.

Priority

3.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which

papers have been placed of record in the file.

Drawings

4.   The drawings are objected to because of a lack of clarity and precision. Figure 5

is missing numbers 35, 36, and 37 as disclosed on page 9, lines 25-28 of the

specification. Please place these numbers in the proper corresponding places on figure

5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply

to the Office action to avoid abandonment of the application. Any amended replacement

drawing sheet should include all of the figures appearing on the immediate prior version

of the sheet, even if only one figure is being amended. The figure or figure number of an

amended drawing should not be labeled as "amended." If a drawing figure is to be

canceled, the appropriate figure must be removed from the replacement sheet, and

where necessary, the remaining figures must be renumbered and appropriate changes

made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the

remaining figures. Each drawing sheet submitted after the filing date of an application

must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office

action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6.   Claims 1-6, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated

by Sarbadhikari et al.(US Patent 5,477,264).

Consider claim 1, Sarbadhikari et al. teach:

A camera control print medium("memory card", 24, figure 2) adapted for use with:

(a) a digital camera("electronic camera", figure 2, column 3, line 30) comprising a

print media reader("Ram Instruction Memory", 31, figure 2), an image sensor(12, figure

2) adapted to capture an original image(column 5, line 59 through column 6, line 10),

and a controllable image manipulator("processor", 20, figure 2) adapted to manipulate

the original image to form a manipulated image(The original image is manipulated using

software enhancements, column 7, lines 51-67.); and

   (b) at least one image manipulation print medium("memory card", 24, figure 2.

Note: The image manipulation print medium can also be in the form of a non-removable

electrically programmable non-volatile memory located inside the camera, column 11,

lines 18-22.) comprising a surface having at least one encoded(column 4, line 41)

image manipulation instruction disposed therein or thereon(The memory card contains

image manipulation instructions within(i.e. has a surface having at least one encoded

image manipulation instruction therein), column 6, lines 40-44 and 53-66.);

   the camera control print medium("memory card", 24, figure 2) comprising a

surface having at least one encoded camera control instruction disposed therein or

thereon(The memory card contains image manipulation instructions within(i.e. has a

surface having at least one encoded image manipulation instruction therein), column 6,

lines 40-44 and 53-66.), the camera control instruction being adapted:

   (a) to be readable by said print media reader(column 7, lines 60-67); and

   (b) when so read, to cause the controllable image manipulator(20) to perform at

least one operation in relation to the at least one image manipulation print medium,

when the at least one image manipulation print medium is subsequently read by the

print media reader(Column 7, lines 60-67. When the memory card(i.e. image

manipulation print medium) is read by the RAM instruction memory(i.e. print media

reader), the processor(i.e. image manipulator) is subsequently instructed to perform the

image manipulation instruction contained within the memory card. This instruction

includes applying new algorithms(i.e. manipulation operations) which provide higher

quality pictures and special features.)

Consider claim 2, and as applied to claim 1 above, Sarbadhikari et al. further

teach:

the at least one operation in relation to the at least one image manipulation print

medium(see claim 1 rationale) comprises manipulating, more than once, the original

image, in accordance with the at least one encoded image manipulation instruction, to

form the manipulated image("Any combination of image processing files may be

used"(i.e. the original image can be manipulated more than once to form the

manipulated image), column 7, line 67 through column 8, line 3).

Consider claim 3, and as applied to claim 1 above, Sarbadhikari et al. further

teach:

the at least one operation in relation to the at least one image manipulation print

medium(see claim 1 rationale) comprises manipulating, more than once, a previously

manipulated image, in accordance with the at least one encoded image manipulation

instruction, to form the manipulated image("Any combination of image processing files

may be used"(i.e. the original image can be manipulated more than once to form the

manipulated image), column 7, line 67 through column 8, line 3. It is clear that if a large

number of image processing files are used to perform image manipulations, then a previously manipulated image(such as an image after a first manipulation) can be manipulated more than once(such as with the second, third, and any other subsequent manipulations).).

     Consider claim 4, and as applied to claim 1 above, Sarbadhikari et al. further teach:

     the at least one operation in relation to the at least one image manipulation print medium(see claim 1 rationale) comprises manipulating a previously manipulated image, in accordance with the at least one encoded image manipulation instruction, to form the manipulated image("Any combination of image processing files may be used"(i.e. the original image can be manipulated more than once to form the manipulated image), column 7, line 67 through column 8, line 3. It is clear that if a large number of image processing files are used to perform image manipulations, then a previously manipulated image(such as an image after a first manipulation) can be manipulated (such as with the second, third, and any other subsequent manipulations).).

     Consider claim 5, and as applied to claim 1 above, Sarbadhikari et al. further teach:

     the at least one image manipulation print medium(see claim 1 rationale) comprises:

a first image manipulation print medium having a first encoded image manipulation instruction disposed in or on its surface(The image data files and enhancement files(i.e. image manipulation instructions) can be stored within a non-removable electrically programmable non-volatile memory(i.e. a first image manipulation print medium) located inside the camera, column 11, lines 18-22), and a second image manipulation print medium("memory card", 24, figure 2) having a second encoded image manipulation instruction disposed in or on its surface(The memory card contains image manipulation instructions within(i.e. has a surface having at least one encoded image manipulation instruction therein), column 6, lines 40-44 and 53-66.), and wherein the at least one operation in relation to the at least one image manipulation print medium comprises:

manipulating the original image in accordance with the first encoded image manipulation instruction(The image manipulation instructions can include instructions for gain adjustment, exposure adjustment, color adjustment and other applications, column 8, line 50 through column 9, line 1. These instructions can be used to manipulate the original image, and can be contained in the first image manipulation print medium, column 11, lines 18-22).) to form an intermediate manipulated image(i.e. a gain corrected image, a color corrected image, etc.) and then manipulating the intermediate manipulated image in accordance with the second encoded image manipulation instruction to form the manipulated image(The memory card(i.e. the second image manipulation medium) can contain templates with which the intermediate manipulated image is combined to form the manipulated image, column 10, lines 24-53, figure 8.

Image manipulations can be done when the image is first captured, processed, and

stored, or post-capture, column 8, lines 20-23. Therefore, a variety of image

manipulations can be performed during different time periods to create the final

manipulated image.).

Consider claim 6, and as applied to claim 1 above, Sarbadhikari et al. further

teach:

the at least one image manipulation print medium(see claim 1 rationale)

comprises:

a first image manipulation print medium having a first encoded image

manipulation instruction disposed in or on its surface(The image data files and

enhancement files(i.e. image manipulation instructions) can be stored within a non-

removable electrically programmable non-volatile memory(i.e. a first image manipulation

print medium) located inside the camera, column 11, lines 18-22), and a second image

manipulation print medium("memory card", 24, figure 2) having a second encoded

image manipulation instruction disposed in or on its surface(The memory card contains

image manipulation instructions within(i.e. has a surface having at least one encoded

image manipulation instruction therein), column 6, lines 40-44 and 53-66.), and wherein

the at least one operation in relation to the at least one image manipulation print

medium comprises:

manipulating a previously manipulated image in accordance with the first

encoded image manipulation instruction(The image manipulation instructions can

include instructions for gain adjustment, exposure adjustment, color adjustment and

other applications, column 8, line 50 through column 9, line 1. These instructions can

be used to manipulate a previously manipulated image, and can be contained in the first

image manipulation print medium, column 11, lines 18-22. Image manipulations can be

performed when the image is first captured, processed, and stored, or post-capture,

column 8, lines 20-23. Therefore, a variety of image manipulations can be performed

during different time periods to create the final manipulated image. It is evident that if a

large number of image manipulations are performed, some of those manipulations will

be performed on previously manipulated images.) to form an intermediate manipulated

image(i.e. a gain corrected image, a color corrected image, etc.) and then manipulating

the intermediate manipulated image in accordance with the second encoded image

manipulation instruction to form the manipulated image(The memory card(i.e. the

second image manipulation medium) can contain templates with which the intermediate

manipulated image is combined to form the manipulated image, column 10, lines 24-53,

figure 8.)

Consider claim 10, and as applied to claim 1 above, Sarbadhikari et al. teach that

the camera control print medium is in the form of a card("memory card", 24, figure 2).

Consider claim 11, and as applied to claim 10 above, Sarbadhikari et al. teach

that the camera control print medium is in the form of a repetition card(Sarbadhikari et

al. teach that different memory cards can be used for different applications, column 8,

lines 50-52, column 10, lines 36-39. It is evident that because the memory card

contains the image manipulation instructions within itself, and due to the fact that it is

removable(column 7, lines 31-35), the memory card can be inserted into the camera on

more than one occasion(i.e. it is in the form of a repetition card).).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Sarbadhikari et al. in view of Hara et al.(US Patent 5,726,435).

        Consider claim 7, and as applied to claim 1 above, Sarbadhikari et al. teach of a

camera control print medium containing encoded camera control instructions(see claim

1 rationale).

        However, Sarbadhikari et al. do not explicitly teach that the cameral control

instructions are encoded in two dimensions on the surface of the camera control print

medium.

        In a field of endeavor relevant to the pertinent problem of providing a camera with

control instructions, Hara et al. teach of an optically readable two-dimensional code, and

a method and apparatus using the same. Hara et al. is similar to Sarbadhikari et al. in

that an image sensor("CCD Camera", 500a) is used to provide an image to a

computer("Host Computer", see figure 17). Hara et al. is also similar in that a computer

readable medium is used to transmit code to a computer(column 7, line 55 through

column 8, line 18), which then executes that code to perform a function(column 16, lines

39-42). Hara et al. is further similar in that instructions are read into RAM before being

processed(column 15, lines 18-21).

In addition to the teachings of Sarbadhikari et al., Hara et al. teach that control

instructions(column 16, lines 39-42) are encoded in two dimensions(The control

instructions are in the form of an optically readable two-dimensional bar code. column 7,

line 55 through column 8, line 18, see figures 9a and 9b) on the surface of a control

print medium(Computer control instructions are printed on a computer readable medium

using the method shown in figure 14, column 14, line 53 through column 15, line 3). A

CCD reader(500a) as taught by Hara et al. can be included at the interface(26, figure 2)

of the electronic camera taught by Sarbadhikari et al. in order to read the two-

dimensional code(column 15, lines 4 through column 16, line 42, see figures 15 and

16).

Therefore, it would have been obvious to a person having ordinary skill in the art

at the time of the invention to include a CCD reader and have control instructions

encoded in two dimensions as taught by Hara et al. in the electronic camera taught by

Sarbadhikari et al. for the benefit that inputting control instructions through the reading

of a bar code enables simple and fast processing(Hara et al., column 17, line 13), and

using a two dimensional bar code further constitutes an improvement by allowing a

larger amount of data two be stored in a relatively small area when compared to a one

dimensional bar code(Hara et al., column 1, lines 26-29).

Consider claim 8, and as applied to claim 1 above, Sarbadhikari et al. teach of at

least one encoded camera control instruction(see claim 1 rationale).

However, Sarbadhikari do not explicitly teach that said control instruction is

printed on the surface of the camera control print medium.

In a field of endeavor relevant to the pertinent problem of providing a camera with

control instructions, Hara et al. teach of an optically readable two-dimensional code, and

a method and apparatus using the same. Hara et al. is similar to Sarbadhikari et al. in

that an image sensor("CCD Camera", 500a) is used to provide an image to a

computer("Host Computer", see figure 17). Hara et al. is also similar in that a computer

readable medium is used to transmit code to a computer(column 7, line 55 through

column 8, line 18), which then executes that code to perform a function(column 16, lines

39-42).

In addition to the teachings of Sarbadhikari et al., Hara et al. teach that control

instructions(column 16, lines 39-42) are encoded in two dimensions(The control

instructions are in the form of an optically readable two-dimensional bar code. column 7,

line 55 through column 8, line 18, see figures 9a and 9b) on the surface of a control

print medium(Computer control instructions are printed on a computer readable medium

using the method shown in figure 14, column 14, line 53 through column 15, line 3).

Hara et al. is further similar in that instructions are read into RAM before being processed(column 15, lines 18-21). A CCD reader(500a) as taught by Hara et al. can be included at the interface(26, figure 2) of the electronic camera taught by Sarbadhikari et al. in order to read the two-dimensional code(column 15, lines 4 through column 16, line 42, see figures 15 and 16).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to include a CCD reader and have control instructions printed on the surface of a camera control print medium as taught by Hara et al. in the electronic camera taught by Sarbadhikari et al. for the benefit that inputting control instructions through the reading of a bar code located on the surface of a camera control print medium enables simple and fast processing(Hara et al., column 17, line 13), and using a two dimensional bar code further constitutes an improvement by allowing a larger amount of data two be stored in a relatively small area when compared to a one dimensional bar code(Hara et al., column 1, lines 26-29).

Consider claim 9, and as applied to claim 8 above, Sarbadhikari et al. teach of at least one camera control print instruction(see claim 1 rationale).

However, Sarbadhikari et al. do not explicitly teach that said camera control print instructions is printed on the surface of the camera control print medium in the form of a plurality of dots.

Hara et al. teach that camera control print instructions are printed on the surface of a camera control print medium(see figure 14) in the form of a plurality of dots("dark cells", see figure 17, column 8, lines 4-6).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert H. Cutler whose telephone number is (571)-270-1460. The examiner can normally be reached on Mon-Fri (7:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on (571)-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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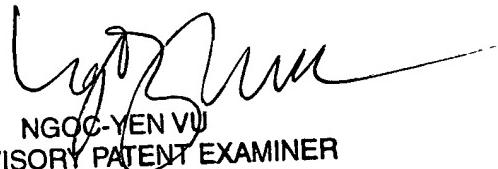
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